



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,733	11/21/2001	Gregory D. Johnson	13190.101	9460
24283	7590	04/04/2006	EXAMINER	
PATTON BOGGS 1660 LINCOLN ST SUITE 2050 DENVER, CO 80264			AUGHENBAUGH, WALTER	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/993,733		JOHNSON, GREGORY D.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Walter B. Aughenbaugh		1772	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12, 14-20, 22-28 and 39-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-20, 22-28 and 39-42 is/are rejected.
- 7) ☒ Claim(s) 43 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 1772

### **DETAILED ACTION**

#### ***Acknowledgement of Applicant's Amendments***

1. The amendments made in claims 11, 12 and 39-41 in the Amendment filed January 24, 2006 have been received and considered by Examiner.

#### ***WITHDRAWN OBJECTIONS***

2. The objection to the specification made of record in paragraph 4 of the previous Office Action mailed January 12, 2006 has been withdrawn due to Applicant's amendments in claims 39-41 in the Amendment filed January 24, 2006.

#### ***WITHDRAWN REJECTIONS***

3. The 35 U.S.C. 112 rejection of claims 39-42 made of record in paragraph 7 of the previous Office Action mailed January 12, 2006 has been withdrawn due to Applicant's amendments in claims 39-41 in the Amendment filed January 24, 2006.

#### ***REPEATED REJECTIONS***

##### ***Claim Rejections - 35 USC § 103***

4. The 35 U.S.C. 103 rejections of claims 1-12, 14-20, 22-28 and 39-42 made of record in paragraphs 8-14 of the previous Office Action mailed January 12, 2006 have been repeated for the reasons previously made of record.

#### ***NEW OBJECTIONS***

##### ***Specification***

5. The amendment filed January 24, 2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not

Art Unit: 1772

supported by the original disclosure is as follows: the recitations “wherein said foam plastic is 32% to 70% gas, by volume” of claim 39, “wherein said foam plastic is 40% to 70% gas, by volume” of claims 11 and 40 and “wherein said foam plastic is 50% to 70% gas, by volume” of claims 12 and 41. See 35 U.S.C. 112, first paragraph, rejection of claims 11, 12 and 39-41 made of record below.

Applicant is required to cancel the new matter in the reply to this Office Action.

***NEW REJECTIONS***

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 11, 12 and 39-41 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The recitations “wherein said foam plastic is 32% to 70% gas, by volume” of claim 39, “wherein said foam plastic is 40% to 70% gas, by volume” of claims 11 and 40 and “wherein said foam plastic is 50% to 70% gas, by volume” of claims 12 and 41 are not supported in the specification as originally filed.

Art Unit: 1772

***Allowable Subject Matter***

8. Claim 43 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
9. The following is an examiner's statement of reasons for allowance: the structure recited in claim 43 of the first end and second end and the structure via which the first and second ends are joined with the plastic core abutting at its ends, the second surface is in contact with the third surface, and the first surface in contact with the fourth surface, is not taught or suggested by the prior art of record.
10. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

11. Applicant's arguments presented on page 6 of the Amendment filed January 24, 2006 regarding the 35 U.S.C. 112 rejection of claims 39-42, as these arguments apply to the new 35 U.S.C. 112 rejection of claims 11, 12 and 39-41 made of record in this Office Action, have been fully considered but are not persuasive.

The statement in the specification that "[t]he foam may be from 10% to 70% gas by volume" (page 2, lines 14-15) does not provide support for the recitation "wherein said foam plastic is 32% to 70% gas, by volume" because this statement does not establish the percentage 32% as a minimum value that Applicant had possession of (i.e. that Applicant contemplated) at

Art Unit: 1772

the time the application was filed. The specification as originally filed does not provide 32% as a possible minimum value. Applicant states that “[t]he MPEP states that a disclosure of a range of 25% to 60% supports a range of 35% to 60%”, but the MPEP states this only in regard to the facts of *In re Wartheim*: the MPEP does not generally state that “a range of 25% to 60% supports a range of 35% to 60%” as Applicant suggests. MPEP 2163.05 III. The *In re Wartheim* decision is not applicable to the instant application because the specification as originally filed in *Wartheim* disclosed an example of 36%, whereas Applicant’s specification as originally filed does not disclose any example values. Nothing in Applicant’s specification as originally filed supports 32% as a minimum value.

Applicant’s statement on page 8 of the amendment filed April 14, 2003 that “the volume percentage of the gas has been placed at 32% to be sure it is well outside the range Sobolev” indicates that Applicant did not “place” [choose] this value based on Applicant’s specification as originally filed but on Sobolev’s disclosure in an effort to overcome the rejection of record. However, since there is no support for this minimum value in Applicant’s specification as originally filed, this minimum value constitutes new matter.

Applicant cites page 4, lines 14 and 15 as providing support for the “32% to 70%” recitation: page 4, lines 14 and 15 plainly do not provide support for this limitation. Page 5, line 32 discloses the 10% to 70% range, which does not provide support for the recitation “wherein said foam plastic is 32% to 70% gas, by volume” for the reasons provided above.

12. Applicant’s arguments presented on pages 6-11 of the Amendment filed January 24, 2006 regarding the 35 U.S.C. 103 rejection of claims 1-12, 14-17, 22, 25-28 and 39-42 have been fully considered but are not persuasive.

Art Unit: 1772

Applicant states the metal/plastic laminate that is included in Exhibit C is the closest prior art, but it is not the closest prior art for the reasons provided in this Office Action. Applicant argues that if Exhibit C does not include the panel of Sobolev, “the only conclusion is that the panel of Sobolev was never used as a concrete formwork panel”, but (1) 35 U.S.C. 102 rejection as being anticipated by Sobolev is not of record and (2) Sobolev teaches a panel for concrete pouring forms (i.e. a concrete formwork panel). The effectiveness of the data presented in Exhibit C was addressed in previous Office Actions.

Applicant argues that “the disclosure of steel is minimal”, but this argument is irrelevant; Sobolev discloses steel as a suitable material for the facing layer. Applicant misrepresents Examiner’s position provided on pages 2-4 of Paper 9 wherein it is not “suggest[ed] that a steel panel made with a ‘slightly more flexible epoxy resin’ would not fail” as Applicant alleges. The 9<sup>th</sup>-14<sup>th</sup> lines of page 3 of Paper 9 state that “absolutely nothing can be inferred from Sobolev’s teachings as to which metal (steel or aluminum) is the superior material in terms of core cracking” because Sobolev does not report a test with a panel comprising steel and the “slightly more flexible epoxy resin”: this is not a suggestion that “a steel panel made with a ‘slightly more flexible epoxy resin’ would not fail” as Applicant alleges is suggested. The point is that Sobolev teaches that “steel/plastic panels” perform equally as well as “aluminum/plastic panels” as discussed on pages 2-4 of Paper 9; therefore, one of ordinary skill in the art would be led to pursue “steel/plastic panels” as much as “aluminum/plastic panels” based on the teachings of Sobolev discussed in pages 2-4 of Paper 9. The argument regarding the “slight cracking” teaching is irrelevant as explained in the Response to the Supp. Dec. section of the Office Action mailed May 20, 2004.



Art Unit: 1772

Applicant argues that one of ordinary skill in the art would not have been motivated to combine Sobolev and Fitzgerald et al. since "Fitzgerald et al. does not disclose a concrete formwork panel but a mold", but as made of record in at least paragraph 16 of Paper 5, Fitzgerald et al. discloses that HDPE is a material of suitable rigidity for use in concrete form mold panels (col. 2, lines 10-12 and col. 3, lines 4-15), so one of ordinary skill in the art of panels used for construction with concrete would be familiar with HDPE as a suitable plastic for panels.

Applicant argues that *In re Boesch* does not apply to the instant case because "the values claimed are outside the ranges in the prior art", but as stated in previous Office Actions, the 30% value mentioned by Sobolev is not an endpoint of a range as presented by Sobolev.

In regard to Applicant's arguments regarding the rejection of claims 39-41, Applicant argues that Examiner's statement initially made in Paper 9 that Sobolev teaches variation of the volume of gas per unit volume of the core layer is not true. However, the teaching of Sobolev that Applicant cites is not relied upon in the rejection made of record in paragraph 21 of Paper 5; the teaching that Applicant cites, that is at col. 22, lines 13-15, is not cited in paragraph 21 of Paper 5. The basis for Examiner's statement that Sobolev teaches variation of the volume of gas per unit volume of the core layer is provided in paragraph 21 of Paper 5 and is reproduced below:

However, Sobolev teach that a filler is used in the plastic (resin) core layer of the panel to lower the density of the core and that the filler is a foaming agent or blowing agent conventionally used to foam various resins as known by those skilled in the art or glass microballoon filler having an average diameter of from about 20 microns to about 12 mm (col. 12, lines 3-16). Sobolev teaches that for lower density cores and lighter weight laminates, the microballoons and foaming agents are the preferred density lowering agents. Sobolev teach that the specific gravity of the resin core, which is equivalent to the density of the core layer, should be set in a range from about 0.8 to about 1.3. Sobolev teaches the variation of the density of the core layer via routine experimentation via control of the volume of gas per unit volume of the core layer via use of glass



Art Unit: 1772

microballoons of a given size or of foaming agents conventionally used to foam resins known by those skilled in the art. It would have therefore been obvious to one of ordinary skill in the art at the time the invention was made to have varied the size of the microballoon filler, and therefore the "gas by volume" value of the foam plastic, or to have experimented with different foaming agents and different amounts of a given foaming agent as known by those of ordinary skill in the art as taught by Sobolev, via routine experimentation in order to achieve the optimal "gas by volume" amount as claimed by Applicants, i.e. volume of gas per unit volume of the core layer expressed as a percentage, that achieves the desired laminate weight depending on the desired end result as taught by Sobolev, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art in the absence of unexpected results. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

The statement "In a number of cases, core density reductions of 30% were readily achieved without loss of important laminate properties" (col. 22, lines 22) does not necessarily "indicate[] that, in the majority of cases, important laminate properties were lost" as Applicant argues and does not necessarily "impl[y] that, in the range above the core reductions of 30%, important laminate properties were lost in all cases" as Applicant argues. The specific gravity range taught by Sobolev of about 0.8 to about 1.3 applies to resin comprising microballoons and also foamed resin (that is foamed with a foaming agent or a blowing agent) because Sobolev considers each of foaming agents, blowing agents and microballoons to be a filler (col. 12, lines 3-6), and Sobolev teaches that the specific gravity range of the "filled resin core" is about 0.8 to about 1.3 (col. 12, lines 6-8). Sobolev also teaches that both microballoons and foaming agents are preferred (col. 12, lines 36-38). Applicant's argument that "only one example of a foam plastic gas by volume is given in Sobolev" is therefore moot because the specific gravity range taught by Sobolev of about 0.8 to about 1.3 applies to foamed resin for the reasons provided above. Applicant's arguments regarding the 26% value are moot because the specific gravity range taught by Sobolev of about 0.8 to about 1.3 applies to foamed resin for the reasons provided above. The comments made in the paragraph bridging pages 10 and 11 of the Amendment filed

Art Unit: 1772

January 24, 2006 have been addressed in the Response to the Supp. Dec. section of the Office Action mailed May 20, 2004.

***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B. Aughenbaugh whose telephone number is 571-272-1488. While the examiner sets his work schedule under the Increased Flexitime Policy, he can normally be reached on Monday-Friday from 8:45am to 5:15pm.

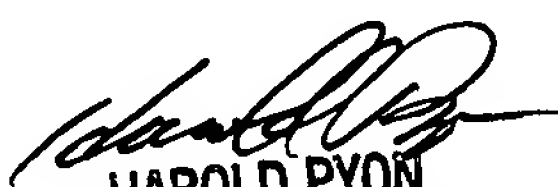
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is to 571-273-8300.

Art Unit: 1772

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Walter B. Aughenbaugh  
03/31/06

WBA

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

3/31/06